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Spectrographic Analyses of Selected Cores
from the Blacktail Mountain Drilling Site,
Flathead County, Montana

By

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This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

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INTRODUCTION

A geochemical study was begun in 1978 as one of several multidisciplinary studies of a stratabound copper occurrence. This study was designed to geochemically characterize stratabound copper occurrences and their host rocks by analyzing drill cores from an occurrence in the uppermost part of the Spokane Formation of the Belt Supergroup.

The analytical results of whole rock semiquantitative optical emission spectrographic analysis of cores from drill holes number 8, 21, and 26, are given in this report. The drill site is located on Blacktail Mountain, T. 26 N., R. 22 W., Sec. 24, Flathead County, Mont.

I am grateful to M. R. Reynolds who supervised and personally sawed a large portion of the drill core into individual samples. I also extend my gratitude to B. M. Clemens and J. F. Rose who prepared the samples for chemical analysis.

PREPARATION AND ANALYSIS OF SAMPLES

The 7.62 cm (3 inch) drill core was sawn into four equal vertical portions. The quarter of the drill core designated for chemical analysis was cut into 15 cm lengths. Thus each 15 cm quarter of drill core constitutes one sample.

Each sample was pulverized to minus 0.149 mm (minus 150 mesh) in a vertical grinder using ceramic grinding plates. Ceramic plates were used to avoid contamination of the rock sample by iron and minor elements found in steel.

Throughout the sample preparation process care was taken to avoid cross-over contamination from one sample to another, and possible contamination from remnant drilling lubricants as well as from the preparation apparatus. No element detected in the various tested materials appears to be present as a contaminant in the rock samples.

Each sample was analyzed semiquantitatively for 31 elements using an optical emission spectrograph. According to the method outlined by Grimes and Marranzino (1968). The semiquantitative spectrographic analytical values are reported as the approximate geometric midpoints 0.1, 0.7, 0.5, 0.3, 0.2, 0.15 (or appropriate multiples of ten) of ranges whose respective boundaries are 1.2, 0.83, 0.56, 0.38, 0.22, 0.18, 0.12 (or appropriate multiples). Since the spectrographic analyses were performed by the same analyst over a relatively short period of time, these semiquantitative procedures are generally accurate to \pm 30 percent of the actual concentration of a given element. The precision is within one adjoining reporting interval on each side of the reported value approximately 90 percent of the time.

The lower limits of determination for the 31 elements determined spectrographically and included in this report are as follows:

For elements determined in percent

Calcium	0.05
Iron	0.05
Magnesium	0.02
Titanium	0.002

For elements determined in parts per million

Antimony	100	Manganese	10
Arsenic	200	Molybdenum	5
Barium	20	Nickel	5
Beryllium	1	Niobium	20
Bismuth	10	Scandium	5
Boron	10	Silver	0.5
Cadmium	20	Strontium	100
Chromium	10	Thorium	100
Cobalt	5	Tin	10
Copper	5	Tungsten	50
Gold	10	Vanadium	10
Lanthanum	20	Yttrium	10
Lead	10	Zinc	200
		Zirconium	10

EXPLANATION OF DATA

Each sample is identified by a six digit code. The first two digits indicate the drill hole number, the third digit is always zero, and the last three digits identify the sequence of samples downward in the core that was recovered.

The results of the semiquantitative spectrographic analyses for 22 elements in the cores from Blacktail Mountain are presented in table 1. Except where indicated by footnotes, antimony, arsenic, cadmium, gold, niobium, thorium, tin, tungsten, and zinc were not detected at their respective limits of determination in any core sample. Only samples from drill holes 8, 21, and 26 are presented herein.

Iron, magnesium, calcium, and titanium are reported in percent (%); all other elements are in parts per million. Other symbols shown on the table are:

N Not detected at the lower limit of determination

< Detected, but below the lowest limit of determination,
which is the value shown

REFERENCES CITED

Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analyses of geologic material: U.S. Geological Survey Circular 591, 6 p.

Table 1.—Results of semiquantitative analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana.

Sample	FFZ	MZ	TZ	W	A	B4	C4	CR
080001	5.0	7.0	1.500	7.0	700	7.0	7.0	7.0
080002	2.0	10.0	2.000	1.0	500	5.0	5.0	5.0
080003	3.0	10.0	3.000	1.0	300	3.0	3.0	3.0
080004	2.0	10.0	2.000	2.0	700	7.0	7.0	7.0
080005	3.0	10.0	3.000	2.0	500	5.0	5.0	5.0
080006	3.0	10.0	1.500	1.5	500	1.5	1.5	1.5
080007	2.0	10.0	1.500	2.0	700	7.0	7.0	7.0
080008	2.0	5.0	1.500	2.0	700	7.0	7.0	7.0
080009	3.0	3.0	2.000	3.0	700	7.0	7.0	7.0
080010	2.0	3.0	2.000	2.0	700	7.0	7.0	7.0
080011	1.5	7.0	3.000	1.5	700	7.0	7.0	7.0
080012	2.0	1.5	2.000	1.5	700	7.0	7.0	7.0
080013	2.0	2.0	2.000	2.0	700	7.0	7.0	7.0
080014	1.5	1.5	2.000	1.5	700	7.0	7.0	7.0
080015	2.0	1.5	2.000	2.0	700	7.0	7.0	7.0
080016	2.0	2.0	2.000	2.0	700	7.0	7.0	7.0
080017	2.0	3.0	2.000	3.0	500	5.0	5.0	5.0
080018	1.5	1.5	2.000	1.5	700	7.0	7.0	7.0
080019	2.0	1.5	2.000	1.5	500	5.0	5.0	5.0
080020	3.0	1.5	2.000	1.5	300	3.0	3.0	3.0
080021	3.0	2.0	2.000	2.0	700	7.0	7.0	7.0
080022	3.0	2.0	2.000	2.0	500	5.0	5.0	5.0
080023	3.0	3.0	2.000	3.0	700	7.0	7.0	7.0
080024	3.0	3.0	2.000	3.0	700	7.0	7.0	7.0
080025	3.0	2.0	2.000	2.0	500	5.0	5.0	5.0
080026	5.0	1.5	1.500	1.5	700	7.0	7.0	7.0
080027	5.0	2.0	2.000	2.0	700	7.0	7.0	7.0
080028	3.0	2.0	2.000	2.0	1,000	7.0	7.0	7.0
080029	3.0	1.5	2.000	1.5	500	5.0	5.0	5.0
080030	3.0	1.5	2.000	1.5	500	5.0	5.0	5.0
080031	2.0	1.0	1.500	1.0	500	5.0	5.0	5.0
080032	2.0	1.5	1.500	1.5	500	5.0	5.0	5.0
080033	2.0	1.0	1.500	1.0	500	5.0	5.0	5.0
080034	2.0	1.0	1.500	1.0	500	5.0	5.0	5.0
080035	3.0	1.5	1.500	1.5	500	5.0	5.0	5.0
080036	2.0	1.0	1.500	1.0	500	5.0	5.0	5.0
080037	2.0	1.0	1.500	1.0	500	5.0	5.0	5.0
080038	2.0	2.0	2.000	2.0	500	5.0	5.0	5.0
080039	3.0	2.0	2.000	2.0	700	7.0	7.0	7.0
080040	3.0	3.0	2.000	3.0	700	7.0	7.0	7.0
080041	1.5	5	1.500	1.5	700	7.0	7.0	7.0
080042	2.0	5	2.000	2.0	700	7.0	7.0	7.0
080043	1.5	5	1.500	1.5	700	7.0	7.0	7.0
080044	1.5	7	1.500	1.5	700	7.0	7.0	7.0
080045	1.5	7	1.500	1.5	700	7.0	7.0	7.0

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana.

Sample	CU	LA	PC	HT	PR	SC	SR	V	ZR
080001	700	70	30	30	10	7	70	100	200
080002	300	30	15	70	7	200	50	50	150
080003	200	50	20	50	7	200	50	50	150
080004	50	70	15	30	10	150	50	50	150
080005	100	70	30	30	10	150	50	50	150
080006	150	70	20	50	15	100	50	50	150
080007	200	70	20	30	10	100	50	50	150
080008	500	70	20	30	10	100	50	50	200
080009	1,500	70	20	50	15	100	50	50	200
080010	700	70	30	30	10	100	50	50	300
080011	300	30	15	30	7	N	50	300	300
080012	150	30	15	30	7	N	50	50	200
080013	150	70	30	30	15	N	300	300	300
080014	100	70	20	30	10	N	100	300	300
080015	70	30	15	30	7	N	50	50	200
080016	100	50	15	30	15	N	100	200	200
080017	150	70	30	30	15	N	50	50	300
080018	100	50	20	30	7	N	50	50	150
080019	15	50	20	30	10	N	50	50	200
080020	15	70	20	30	15	N	100	300	300
080021	20	70	20	30	15	N	100	200	200
080022	15	50	20	30	15	N	100	200	200
080023	20	70	20	30	15	N	70	300	300
080024	30	70	20	30	15	N	150	300	300
080025	15	70	20	30	15	N	100	300	300
080026	50	50	20	30	15	N	150	300	300
080027	30	70	20	30	15	N	70	300	300
080028	10	70	20	30	10	N	70	300	300
080029	15	50	20	30	7	N	70	300	300
080030	30	50	20	30	15	N	100	300	300
080031	20	70	15	30	7	N	70	300	300
080032	20	50	15	30	10	N	70	300	300
080033	20	70	20	30	10	N	70	300	300
080034	20	70	15	30	10	N	70	300	300
080035	15	70	20	30	15	N	100	300	300
080036	15	30	20	30	7	N	70	300	300
080037	<5	70	20	30	15	N	50	50	200
080038	15	50	20	30	10	N	70	300	300
080039	50	70	20	30	15	N	100	300	300
080040	10	70	20	30	10	N	70	300	300
080041	70	30	15	30	7	N	50	50	200
080042	50	70	15	30	10	N	70	300	300
080043	15	70	20	30	7	N	70	300	300
080044	15	50	20	30	7	N	50	50	200
080045	5	70	20	30	7	N	50	50	200

Table 1.—Results of semiquantitative geochemical analyses of selected cores from the alactail Mountain drilling sites, Flathead County, Montana.—continued.

Sample	FFZ	AGZ	ENY	TIZ	WY	A6	R	RA	RF	RI	CD	CR	
D80046	5.0	2.0	1.00	-2.0	700	N	70	1,500	1.5	N	15	150	
D80047	2.0	2.0	-1.0	-2.0	500	N	70	700	2.0	N	10	70	
D80048	2.0	1.5	-1.0	-2.0	500	N	70	500	1.0	N	7	100	
D80049	2.0	1.5	-1.0	-2.0	500	N	70	500	1.5	N	10	70	
D80050	3.0	2.0	-1.0	-2.0	700	N	70	500	2.0	N	15	.50	
D80051	3.0	2.0	-2.0	-2.0	1,500	N	100	1,500	2.0	N	10	100	
D80052	2.0	3.0	-2.0	-2.0	700	N	70	500	2.0	N	10	70	
D80053	2.0	2.0	-1.5	-2.0	1,000	N	100	700	2.0	N	10	70	
D80054	3.0	5.0	-2.0	-2.0	1,000	N	70	700	2.0	N	7	70	
D80055	3.0	7.0	-2.0	-2.0	1,500	N	70	500	1.0	N	10	70	
D80056	6.0	7.0	5.00	-2.0	500	1,500	N	70	700	2.0	N	7	100
D80057	2.0	5.0	-2.0	-2.0	1,000	N	70	500	2.0	N	7	.50	
D80058	2.0	5.0	-2.0	-2.0	1,500	N	70	500	1.5	N	10	70	
D80059	2.0	3.0	-2.0	-2.0	1,000	N	70	500	1.5	N	10	70	
D80060	2.0	3.0	-2.0	-2.0	1,000	N	70	500	1.5	N	10	150	
D80061	3.0	3.0	3.00	-2.0	1,000	N	70	700	2.0	N	10	100	
D80062	2.0	2.0	1.50	-2.0	500	1,000	N	70	500	2.0	N	7	70
D80063	2.0	2.0	-2.0	-2.0	500	1,000	N	70	500	2.0	N	15	70
D80064	2.0	2.0	-2.0	-2.0	500	1,000	N	70	500	2.0	N	10	100
D80065	2.0	2.0	-2.0	-2.0	500	1,000	N	70	500	1.5	N	10	100
D80066	2.0	3.0	-1.00	-2.0	700	N	100	700	2.0	N	10	70	
D80067	2.0	5.0	-1.50	-2.0	700	N	70	500	2.0	N	10	.50	
D80068	3.0	3.0	-1.00	-2.0	500	N	70	700	2.0	N	15	70	
D80069	2.0	3.0	-1.50	-2.0	500	N	70	500	2.0	N	10	.50	
D80070	2.0	5.0	-2.00	-2.0	1,000	N	70	500	2.0	N	10	.50	
D80071	2.0	3.0	-2.0	-2.0	500	N	70	500	2.0	N	7	30	
D80072	2.0	3.0	-2.0	-2.0	500	N	70	500	2.0	N	7	.50	
D80073	2.0	3.0	-2.0	-2.0	500	N	70	500	2.0	N	7	.50	
D80074	2.0	2.0	-2.0	-2.0	500	N	70	500	2.0	N	7	.50	
D80075	2.0	2.0	-2.0	-2.0	500	N	70	500	2.0	N	7	.50	
D80076	2.0	2.0	-1.50	-2.0	500	N	70	500	2.0	N	7	30	
D80077	2.0	5.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	70	
D80078	1.5	3.0	-2.00	-2.0	700	N	70	500	2.0	N	7	.50	
D80079	1.5	3.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	50	
D80080	3.0	5.0	-2.00	-2.0	1,000	N	70	500	2.0	N	10	70	
D80081	1.5	3.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	70	
D80082	1.5	3.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	.50	
D80083	1.5	3.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	.50	
D80084	1.5	3.0	-2.00	-2.0	1,000	N	70	500	2.0	N	7	.50	
D80085	1.5	2.0	-2.0	-2.0	700	N	70	500	2.0	N	10	.50	
D80086	2.0	3.0	-1.50	-2.0	700	N	70	500	2.0	N	10	.50	
D80087	1.5	2.0	-1.00	-2.0	500	N	70	500	2.0	N	10	.50	
D80088	1.5	3.0	-2.00	-2.0	700	N	70	500	2.0	N	10	.70	
D80089	3.0	2.0	-2.00	-2.0	700	N	70	500	2.0	N	15	100	
D80090	2.0	2.0	-2.00	-2.0	700	N	70	500	2.0	N	10	.70	

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Clarktail Mountain drilling sites, Flathead County, Montana,--continued.

Sample	LA	RI	SC	Y	ZR
080046	5	70	4	100	50
080047	<5	50	20	300	50
080048	>5	70	4	300	50
080049	<5	70	4	300	50
080050	<5	70	4	300	50
080051	080052	080053	080054	080055	080056
080056	<5	70	4	100	100
080057	<5	50	20	200	50
080058	<5	50	20	200	50
080059	<5	50	20	200	50
080060	<5	50	20	200	50
080061	<5	70	4	200	50
080062	<5	70	4	200	50
080063	<5	50	20	200	50
080064	<5	70	4	200	50
080065	<5	50	20	200	50
080066	080067	080068	080069	080070	080071
080066	<5	70	4	200	50
080067	<5	50	20	200	50
080068	<5	70	4	200	50
080069	<5	70	4	200	50
080070	<5	70	4	200	50
080071	<5	70	4	200	50
080072	<5	70	4	200	50
080073	<5	50	20	200	50
080074	<5	50	20	200	50
080075	<5	70	4	200	50
080076	<5	70	4	200	50
080077	<5	70	4	200	50
080078	<5	50	20	200	50
080079	<5	50	20	200	50
080080	<5	70	4	200	50
080081	<5	70	4	200	50
080082	<5	50	20	200	50
080083	<5	50	20	200	50
080084	<5	70	4	200	50
080085	<5	70	4	200	50
080086	<5	70	4	200	50

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana,--continued.

sample	FFZ	MgY	Al	TiZ	Mn	Ag	R	Ni	Cr
080001	2.0	2.0	2.0	2.0	3.00	N	70	1,000	100
080002	2.0	1.5	2.0	2.0	3.00	N	70	700	70
080003	3.0	1.5	2.0	2.0	5.00	N	70	1,500	70
080004	2.0	1.5	2.0	2.0	1.50	N	70	1,500	70
080005	3.0	2.0	1.50	2.0	7.00	N	70	1,000	70
080006	3.0	2.0	2.0	2.0	3.00	N	70	1,000	70
080007	2.0	1.5	2.0	2.0	3.00	N	70	1,000	70
080008	2.0	1.5	2.0	2.0	3.00	N	70	1,000	70
080009	2.0	1.5	2.0	2.0	3.00	N	70	1,000	70
080010	2.0	1.5	2.0	2.0	3.00	N	70	1,000	70
080011	2.0	1.5	2.0	2.0	3.00	N	70	1,000	70
080101	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080102	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080103	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080104	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080105	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080106	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080107	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080108	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080109	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080110	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080111	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080112	2.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080113	2.0	1.0	2.0	2.0	5.00	N	70	1,000	50
080114	3.0	1.5	2.0	2.0	5.00	N	70	1,000	50
080115	3.0	2.0	2.0	2.0	2.00	N	70	1,000	50
080116	2.0	1.5	2.0	2.0	3.00	N	70	1,000	50
080117	2.0	1.5	2.0	2.0	3.00	N	70	1,000	50
080118	3.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080119	3.0	3.0	2.0	2.0	5.00	N	70	1,000	50
080120	3.0	3.0	2.0	2.0	5.00	N	70	1,000	50
080121	2.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080122	2.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080123	2.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080124	3.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080125	2.0	2.0	2.0	2.0	5.00	N	70	1,000	50
080126	1.5	3.0	2.0	2.0	1.500	N	50	2.00	10
080127	1.5	3.0	2.0	2.0	1.500	N	70	5.00	50
080128	1.5	3.0	2.0	2.0	1.500	N	70	5.00	50
080129	1.5	3.0	2.0	2.0	1.500	N	70	3.00	70
080130	1.0	2.0	2.0	2.0	1.500	N	70	2.00	70
080131	2.0	3.0	2.0	2.0	1.500	N	70	2.00	50
080132	1.5	5.0	2.0	2.0	1.500	N	70	2.00	10
080133	1.5	5.0	2.0	2.0	1.500	N	70	2.00	10
080134	2.0	5.0	2.0	2.0	1.500	N	70	2.00	30
080135	3.0	10.0	7.00	7.00	1.500	N	70	2.00	10

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling site, Flathead County, Montana,—continued.

sample	Cu	La	Lu	Y	Zr
	""	Nt	Pb	Sr	V
080091	<5	70	30	15	300
080092	<5	50	20	15	200
080093	<5	70	20	30	200
080094	<5	50	30	15	150
080095	<5	70	20	10	200
080096	<5	70	30	15	300
080097	<5	70	20	10	200
080098	<5	50	15	10	200
080099	<5	30	20	10	200
080100	<5	50	20	10	200
080101	70	20	15	70	50
080102	70	20	10	70	50
080103	100	20	15	100	50
080104	50	20	15	50	50
080105	50	20	10	50	50
080106	70	20	15	70	50
080107	70	20	10	70	50
080108	70	20	10	70	50
080109	70	20	10	70	50
080110	70	20	10	70	50
080111	70	20	10	70	50
080112	70	20	15	70	50
080113	30	20	15	30	50
080114	50	20	15	50	50
080115	50	20	15	50	50
080116	70	20	10	70	50
080117	70	20	15	70	50
080118	70	20	15	70	50
080119	20	20	15	20	200
080120	<5	50	20	15	100
080121	<5	50	20	15	100
080122	<5	70	20	10	150
080123	<5	50	20	10	150
080124	<5	70	20	15	100
080125	<5	70	20	10	100
080126	5	30	10	<100	50
080127	20	50	50	70	50
080128	30	30	30	100	100
080129	200	N	10	70	100
080130	200	70	70	70	70
080131	50	50	10	100	100
080132	1,000	100	150	70	100
080133	2,000	100	100	70	100
080134	2,000	50	150	70	150
080135	1,000	50	150	70	150

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana.—Continued.

Sample	Pre-	Mg/Z	Ca/Y	Ti/Y	Mn	Al/C	N	R/A	q/F	q/I	CO	CR
080136	2.0	7.0	5.00	.20	2,000	1.5	70	700	2.0	<10	15	70
080137	2.0	7.0	5.00	.50	1,500	.5	70	500	2.0	<10	15	70
080138/	2.0	7.0	2.00	.50	1,000	N	70	700	2.0	N	20	100
080139	2.0	7.0	3.00	.20	1,500	N	70	500	2.0	N	15	100
080140	1.5	5.0	1.00	.50	700	N	70	700	2.0	N	10	100
080141	2.0	5.0	1.00	.20	500	N	70	700	2.0	N	10	100
080142	1.5	5.0	1.00	.50	500	N	70	700	2.0	N	15	100
080143	1.5	5.0	2.00	.50	1,500	N	70	500	1.5	N	15	70
080144	2.0	5.0	1.50	.20	700	N	70	700	1.5	N	5	70
080145	2.0	5.0	1.00	.50	500	N	70	700	1.5	N	10	70
080146	2.0	3.0	1.00	.20	2,000	N	70	2,000	3.0	N	15	100
080147	2.0	2.0	2.00	.7	700	1.500	70	2,000	3.0	N	10	100
080148	2.0	2.0	2.00	.50	500	N	70	2,000	1.5	N	10	70
080149	2.0	2.0	2.00	.20	500	N	70	2,000	1.5	N	10	50
080150	2.0	2.0	2.00	.50	500	N	70	2,000	2.0	N	10	50
080151	2.0	2.0	1.00	.30	500	N	70	1,500	2.0	N	10	70
080152	2.0	2.0	2.00	.10	500	N	70	700	2.0	N	15	70
080153	2.0	2.0	2.00	.50	500	N	70	1,500	2.0	N	10	100
080154	2.0	2.0	2.00	.20	500	N	70	1,000	2.0	N	10	100
080155	2.0	2.0	2.00	.15	500	N	70	700	2.0	N	10	100
080156	2.0	2.0	2.00	.20	500	N	70	1,000	2.0	N	10	100
080157	2.0	2.0	1.00	.30	500	N	70	1,000	3.0	N	10	100
080158	2.0	2.0	2.00	.20	500	N	70	700	2.0	N	7	100
080159	2.0	2.0	2.00	.50	500	N	70	700	2.0	N	10	100
080160	2.0	2.0	2.00	.50	500	N	70	500	2.0	N	7	100
080161	2.0	2.0	2.00	.15	500	N	70	700	2.0	N	7	70
080162	2.0	2.0	2.00	.20	2,000	N	70	700	2.0	N	7	70
080163/	2.0	2.0	1.00	.30	1,000	N	70	700	3.0	N	7	100
080164/	2.0	2.0	2.00	.30	500	N	70	1,000	3.0	N	7	150
080165	2.0	2.0	1.00	.30	500	N	70	700	2.0	N	15	70
080166	2.0	2.0	1.00	.20	500	N	70	700	2.0	N	15	100
080167	2.0	1.5	1.00	.10	1,000	N	70	700	1.5	N	7	100
080168	2.0	1.5	1.00	.10	500	N	70	700	2.0	N	7	100
080169	2.0	1.5	1.00	.20	500	N	70	700	2.0	N	5	70
080170	2.0	1.5	1.00	.15	500	N	70	700	2.0	N	7	100
080171	3.0	2.0	1.00	.20	500	N	70	700	2.0	N	10	70
080172	2.0	2.0	1.00	.20	500	N	70	1,000	2.0	N	10	100
080173	1.5	1.5	1.00	.10	500	N	70	1,000	2.0	N	10	100
080174	2.0	1.5	1.00	.20	500	N	70	500	1.5	N	5	70
080175	1.5	1.5	1.00	.20	500	N	70	500	2.0	N	5	70
080176	5.0	3.0	1.50	.50	500	N	70	1,000	3.0	N	7	70
080177	3.0	2.0	1.00	.30	500	N	70	1,000	3.0	N	15	150
080178	3.0	2.0	1.00	.30	500	N	70	1,000	3.0	N	15	150
080179	5.0	2.0	2.00	.20	1,000	N	70	700	2.0	N	10	50
080180	3.0	2.0	2.00	.20	1,000	N	70	700	2.0	N	10	70
	3.0	2.0	1.00	.30	1,500	N	70	500	2.0	N	15	15

See footnotes at end of table.

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana,--continued.

sample	cu	la	mc	nt	pa	sc	sr	v	y	zp
080136	500	70	20	30	15	100	100	50	200	200
080137	100	70	20	30	10	<100	70	50	150	150
080138 ^{1/}	70	70	20	30	15	n	100	50	200	200
080139	20	70	20	30	10	100	100	50	300	300
080140	10	70	20	30	15	<100	150	50	200	200
080141	7	70	30	30	15	n	150	50	300	300
080142	7	50	30	30	10	100	100	50	300	300
080143	5	50	15	30	7	50	50	50	300	300
080144	20	50	20	30	10	100	100	50	300	300
080145	50	70	30	30	15	n	100	50	300	300
080146	100	70	20	30	15	n	150	70	300	300
080147	15	30	10	30	10	100	70	50	300	300
080148	7	50	20	30	10	100	70	50	200	200
080149	10	50	20	30	10	n	70	50	300	300
080150	15	70	20	30	10	n	100	50	300	300
080151	30	70	20	30	10	70	70	50	200	200
080152	20	70	20	30	15	n	100	50	200	200
080153	10	70	20	30	15	n	150	50	200	200
080154	10	50	20	30	10	100	100	50	200	200
080155	10	70	20	30	15	n	100	50	200	200
080156	10	70	20	30	15	n	150	50	200	200
080157	5	70	20	30	10	100	100	50	200	200
080158	<5	70	20	30	10	100	100	50	200	200
080159	<5	50	20	30	7	70	70	50	150	150
080160	<5	50	20	30	10	100	100	50	150	150
080161	<5	70	20	30	10	100	100	50	200	200
080162 ^{1/}	<5	70	20	30	15	150	150	50	200	200
080163 ^{1/}	<5	100	20	30	15	150	150	70	300	300
080164 ^{1/}	<5	50	20	30	10	100	100	50	200	200
080165	5	50	20	30	10	100	100	50	200	200
080166	<5	50	20	30	10	100	100	50	150	150
080167	<5	50	20	30	15	100	100	50	300	300
080168	10	50	10	30	7	70	70	50	150	150
080169	20	50	20	30	10	100	100	50	200	200
080170	30	50	20	30	15	100	100	50	200	200
080171	10	50	20	30	10	100	100	50	200	200
080172	5	50	20	30	15	100	100	50	200	200
080173	<5	20	15	30	7	50	50	50	200	200
080174	7	30	15	30	10	70	70	50	200	200
080175	15	30	20	30	10	100	100	50	200	200
080176	30	50	20	30	10	100	100	50	200	200
080177	30	50	20	30	15	100	100	50	200	200
080178 ^{1/}	20	70	20	30	15	n	100	50	150	150
080179	30	70	20	30	15	n	100	50	150	150
080180	7	70	20	30	10	100	100	50	200	200

¹See footnotes at end of table.

Table 1--Results of semi-quantitative spectrographic analyses of selected cores from the Blacktail Mountain drillings sites, Flathead County, Montana--continued.

Sample	FEZ	MZ	CAX	TIZ	MN	AC	Al	GA	Fe	Co	Cr
080191	3.0	2.0	3.00	.20	1,000	2	70	500	2.0	15	70
080192	3.0	3.0	3.00	.20	1,000	N	70	700	3.0	10	70
080193	3.0	1.5	*30	.30	300	1	70	700	1.0	10	70
080194	3.0	2.0	*70	.20	500	N	70	700	3.0	10	70
080195	3.0	5.0	*30	.30	1,000	2	70	700	2.0	15	70
080196	2.0	2.0	3.00	.20	1,500	N	70	700	2.0	7	50
080197	2.0	3.0	3.00	.20	1,000	N	70	700	1.0	10	70
080198	2.0	3.0	3.00	.20	700	N	70	700	1.5	5	50
080199	2.0	1.0	2.00	.15	700	N	70	500	1.5	N	50
080199a	2.0	1.0	3.00	.20	1,500	N	70	500	2.0	7	70
080199b	2.0	3.0	3.00	.20	1,500	N	70	700	2.0	7	50
080199c	2.0	1.0	2.00	.15	700	N	70	700	1.0	10	70
080199d	2.0	1.0	2.00	.15	700	N	70	700	1.0	10	70
080199e	1.5	1.0	2.00	.20	700	N	50	700	1.5	50	50
080199f	2.0	1.5	1,50	.20	700	N	50	700	1.5	50	50
080199g	2.0	2.0	1,00	.20	300	N	70	1,000	3.0	7	70
080199h	2.0	1.0	1,00	.30	300	N	70	1,500	2.0	10	70
080199i	2.0	1.5	*50	.30	200	N	70	700	2.0	10	70
080199j	2.0	2.0	*50	.30	1,500	N	70	1,500	3.0	7	70
080199k	2.0	1.5	*50	.30	500	N	50	300	2.0	10	70
080199l	2.0	1.5	*50	.30	200	N	50	500	2.0	10	70
080199m	2.0	1.5	*50	.30	1,000	N	70	700	2.0	10	70
080199n	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199o	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199p	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199q	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199r	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199s	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199t	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199u	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199v	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199w	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199x	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199y	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199z	2.0	1.0	*70	.20	700	N	70	700	1.0	10	70
080199aa	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ab	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ac	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ad	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ae	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199af	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ag	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ah	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ai	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199aj	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ak	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199al	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199am	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199an	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ao	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ap	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199aq	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ar	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199as	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199at	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199au	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199av	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199aw	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ax	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ay	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199az	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ba	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bb	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bc	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bd	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199be	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bf	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bg	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bh	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bi	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bj	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bk	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bl	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bm	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bn	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bo	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bp	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bq	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bs	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bt	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bu	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bv	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bw	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bx	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199by	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199bz	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ca	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cb	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cc	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cd	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ce	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cf	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cg	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ch	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ci	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cj	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ck	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cl	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cm	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cn	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199co	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cp	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cq	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cr	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cs	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199ct	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cu	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cv	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cw	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cx	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cy	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199cz	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199da	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199db	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199dc	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
080199dd	2.0	1.0	*70	.20	1,000	N	70	700	1.0	10	70
08											

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana,--continued.

sample	cu	la	mo	ni	pr	sc	sr	v	zr
080181	10	50	n	70	30	10	100	70	200
080182	15	50	n	70	30	10	<100	50	200
080183	20	50	n	70	30	10	n	100	200
080184	20	70	n	20	30	10	n	100	200
080185	20	100	n	30	30	15	n	150	200
080186	<5	50	n	20	30	7	n	70	200
080187	n	50	n	20	30	10	n	70	150
080188	<5	70	n	30	30	15	n	100	200
080189	7	50	n	15	30	7	n	70	150
080190	5	50	n	15	30	7	n	50	150
080191	20	50	n	15	30	7	n	70	200
080192	15	50	n	20	30	7	<100	70	150
210001	<5	70	n	15	20	15	n	100	300
210002	<5	70	n	20	30	15	n	100	300
210003	<5	70	n	20	30	10	n	70	300
210004	<5	70	n	20	30	10	n	70	200
210005	n	100	n	20	30	15	n	150	100
210006	<5	70	n	20	30	15	n	150	100
210007	7	50	n	10	30	7	n	30	50
210008	30	50	n	5	30	7	n	50	500
210009	20	70	n	10	30	15	n	150	50
210010	10	70	n	20	30	15	n	100	50
210011	15	70	n	20	30	15	n	100	50
210012	15	70	n	20	30	15	n	100	50
210013	30	50	n	5	30	15	n	150	50
210014	30	70	n	20	30	15	n	150	50
210015	50	70	n	20	30	15	n	150	70
210016	50	70	n	30	30	15	n	150	300
210017	<5	70	n	30	30	15	n	150	200
210018	2	70	n	20	30	15	n	100	300
210019	<5	70	n	20	30	15	n	100	200
210020	<5	50	n	30	30	15	<100	150	200
210021	5	30	n	10	30	10	100	100	200
210022	5	70	n	20	30	15	100	100	200
210023	300	50	n	20	30	10	n	100	150
210024	200	50	n	70	30	15	100	100	300
210025	5,000	70	n	70	30	15	100	50	200
210026	1,500	70	n	70	30	15	100	50	300
210027	2,000	70	n	70	30	15	100	50	150
210028	3,000	70	n	70	30	15	100	50	150
210029	1,000	70	n	70	30	15	100	50	100
210030	2,000	70	n	70	30	15	150	50	200
210031	2,000	70	n	70	30	15	100	50	150
210032	1,000	70	n	70	30	15	150	50	300
210033	1,000	70	n	70	30	15	100	50	300

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling site,
Flathead County, Montana—continued.

Sample	FEx	462	484	512	540	AG	R	RA	RF	SI	rn	rN	CR
210034	2.0	7.0	2.00	• 2.0	1.500	< 5	70	1,000	2.0	N	15	70	20
210035	3.0	7.0	2.00	• 2.0	1,000	N	70	700	2.0	N	15	70	20
210036	5.0	5.0	1.00	• 3.0	700	N	100	700	2.0	N	15	150	20
210037	5.0	3.0	1.50	• 3.0	700	N	70	700	2.0	N	20	100	20
210038	2.0	3.0	2.00	• 3.0	1,500	N	70	500	2.0	N	7	70	20
210039	2.0	2.0	1.50	• 2.0	1,500	N	70	700	1.5	N	7	70	20
210040	2.0	3.0	2.00	• 2.0	2.00	N	100	700	1.5	N	7	100	20
210041	3.0	2.0	1.00	• 3.0	700	N	70	1,000	2.0	N	15	100	20
210042	5.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210043	5.0	3.0	2.00	• 2.0	500	N	70	3,000	2.0	N	7	100	20
210044	5.0	2.0	2.00	• 2.0	2,000	N	70	2,000	1.5	N	7	100	20
210045 1/	7.0	2.0	2.00	• 2.0	300	N	70	2,000	2.0	N	7	70	20
210046	7.0	3.0	2.00	• 2.0	300	N	70	1,500	2.0	N	7	100	20
210047	7.0	2.0	2.00	• 2.0	200	N	70	1,000	3.0	N	7	70	20
210048	7.0	2.0	2.00	• 2.0	200	N	70	1,000	3.0	N	10	100	20
210049	7.0	2.0	2.00	• 2.0	200	N	70	1,000	2.0	N	10	70	20
210050	7.0	2.0	2.00	• 2.0	200	N	70	1,000	2.0	N	10	70	20
210051	7.0	5.0	1.00	• 5.0	500	N	70	1,000	2.0	N	15	100	20
210052	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210053	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210054	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210055	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210056	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210057	7.0	5.0	1.50	• 5.0	500	N	70	1,000	2.0	N	15	50	20
210058	5.0	3.0	2.00	• 2.0	500	N	70	1,000	2.0	N	15	70	20
210059	5.0	3.0	2.00	• 2.0	500	N	70	1,000	2.0	N	15	70	20
210060	5.0	3.0	2.00	• 2.0	500	N	70	1,000	2.0	N	15	70	20
210061	5.0	3.0	2.00	• 2.0	500	N	70	1,000	2.0	N	7	70	20
210062	5.0	3.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210063	5.0	3.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	50	20
210064	5.0	3.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210065	5.0	3.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210066	7.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210067	7.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210068	3.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210069	3.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210070	3.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210071	7.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210072	7.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210073	7.0	2.0	2.00	• 2.0	500	N	70	1,000	1.5	N	7	70	20
210074	5.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210075	5.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210076	5.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210077	5.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210078	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210079	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210080	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210081	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210082	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210083	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210084	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210085	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210086	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210087	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210088	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210089	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210090	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210091	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210092	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210093	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210094	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210095	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210096	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210097	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210098	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210099	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210100	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210101	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210102	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210103	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210104	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210105	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210106	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210107	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210108	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210109	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210110	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210111	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210112	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210113	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210114	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210115	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210116	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210117	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210118	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210119	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210120	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210121	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210122	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210123	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210124	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210125	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210126	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210127	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210128	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210129	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210130	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210131	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210132	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7	70	20
210133	7.0	3.0	2.00	• 2.0	500	N	70	1,500	2.0	N	7</		

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana,--continued.

sample	cu	la	wn	hi	pr	sc	sr	v	y	zr
210034	200	70	N	30	10	15	N	150	50	300
210035	30	70	N	20	30	15	100	100	50	300
210036	10	70	N	30	30	15	N	100	50	300
210037	10	70	N	30	30	15	N	150	50	300
210038	10	70	N	30	15	10	N	70	50	300
210039	10	70	N	20	20	10	N	70	50	200
210040	30	70	N	20	30	15	N	100	50	300
210041	70	70	N	20	30	15	N	100	50	300
210042	70	70	N	20	30	10	N	70	50	300
210043	50	70	N	30	30	15	300	70	50	500
210044	20	70	N	30	30	15	100	70	50	300
210045	20	70	N	30	30	15	N	70	50	300
210046	30	70	N	30	30	15	N	100	50	300
210047	30	70	N	30	30	15	N	150	50	300
210048	15	70	N	30	30	20	N	150	50	200
210049	30	70	N	30	30	15	N	150	50	200
210050	20	70	N	50	30	15	N	150	50	200
210051	20	70	N	30	50	15	N	150	50	200
210052	10	70	N	30	30	15	<100	150	50	200
210053	7	70	N	20	30	10	N	100	50	200
210054	<5	70	N	30	30	15	N	100	50	200
210055	<5	70	N	30	30	15	N	100	50	200
210056	<5	70	N	20	30	15	N	150	50	200
210057	<5	70	N	30	30	15	N	150	50	200
210058	<5	70	N	50	30	15	N	100	50	200
210059	<5	70	N	30	30	15	N	150	50	200
210060	<5	70	N	30	30	15	N	150	50	200
210061	<5	70	N	15	30	10	N	70	50	200
210062	<5	70	N	20	30	15	N	100	50	200
210063	<5	70	N	20	30	10	N	70	50	200
210064	10	70	N	20	30	15	N	100	50	200
210065	<5	70	N	15	30	10	N	70	50	200
210066	5	70	N	20	30	15	N	100	50	200
210067	<5	70	N	20	30	15	N	70	50	200
210068	7	50	N	15	30	10	N	70	50	200
210069	15	70	N	20	30	10	N	100	50	200
210070	20	70	N	30	30	15	N	150	50	200
210071	15	70	N	30	30	15	N	150	50	200
210072	15	50	N	30	30	15	N	150	50	200
210073	7	70	N	30	30	15	N	150	50	200
210074	30	70	N	20	30	15	N	150	50	300
210075	20	70	N	30	30	15	N	150	50	300
210076	5	70	N	30	30	15	N	150	50	300
210077	7	70	N	20	30	15	N	150	50	300
210078	10	70	N	30	30	15	N	150	50	300

Table I.—Results of semiquantitative spectrophotometric analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana.—continued.

Table 1.—Results of semiquantitative spectrographic analyses of selected cores from the Blackfoot Mountain drilling sites, Flathead County, Montana.—continued.

sample	Cu	Fe	Mn	Ni	Pb	Sc	Sr	Ti	Zr
210079	1.5	50	70	70	30	7	70	50	300
210080	5	100	20	30	30	15	150	70	300
210081	<5	70	20	30	30	15	150	70	300
210082	<5	70	30	30	30	10	100	70	300
210083	<5	100	20	30	30	15	70	200	300
210084	1.0	70	N	30	30	15	N	200	70
210085	2.0	50	N	15	30	7	<100	100	300
210086	2.0	50	N	10	30	7	N	70	300
210087	5.0	50	N	10	30	5	N	70	200
210088	5.0	20	N	5	30	7	N	70	200
210089	7.0	70	N	70	30	10	<100	150	300
210090	15.0	70	N	30	30	15	<100	150	300
210091	70	70	N	30	30	10	N	70	300
210092	7.0	70	N	30	30	15	N	70	200
210093	100	70	N	30	30	15	N	70	200
210094	15.0	70	N	15	70	20	N	150	300
210095	3.0	70	N	50	30	15	N	70	300
210096	5.0	70	N	30	30	20	N	150	300
210097	7.0	70	N	10	30	10	N	70	200
210098	5.0	70	N	20	30	15	N	70	300
210099	5.0	50	N	20	30	10	N	70	200
210100	3.0	70	N	15	70	15	N	70	300
210101	3.0	70	N	20	30	15	N	70	300
210102	5.0	70	N	30	30	15	N	70	200
210103	3.0	70	N	20	30	15	N	70	300
210104	1.5	70	N	20	30	15	N	100	200
210105	1.0	70	N	20	30	15	N	100	300
210106	2.0	70	N	30	30	20	N	150	300
260001	<5	70	N	20	30	15	N	150	200
260002	<5	70	N	20	30	15	N	150	300
260003	<5	70	N	20	30	15	N	150	300
260004	7	70	N	30	30	10	N	100	300
260005	7	50	N	20	30	10	N	100	300
260006	1.5	50	N	20	30	10	N	100	300
260007	5	70	N	30	30	15	N	100	300
260008	1.0	70	N	30	30	10	N	100	300
260009	5	70	N	30	30	15	N	150	300
260010	5	50	N	20	30	10	N	100	300
260011	N	50	N	20	30	10	N	100	300
260012	5	70	N	30	30	10	N	100	200
260013	1.5	50	N	10	30	7	N	70	200
260014	1.0	70	N	10	30	7	N	100	150
260015	1.5	70	N	15	30	7	N	70	150
260016	1.5	70	N	20	30	15	N	70	150
260017	1.0	70	N	30	30	15	N	70	150

See footnotes at end of table.

Table 1.--Results of semi-quantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling site, Flathead County, Montana,--continued.

sample	FEZ	MGZ	CAS	TRX	WY	AG	B	R4	RF	RI	CO	CR
260018	3.0	1.5	1.00	.20	500	50.0	70	1,000	2.0	N	10	70
260010	2.0	-	.7	.10	500	50.0	70	700	2.0	N	5	70
260020	1.5	.5	.5	.10	500	50.0	70	700	2.0	N	5	70
260021	3.0	.7	.10	.50	700	70.0	70	700	2.0	N	7	70
260022	2.0	.7	.10	.50	1,000	100.0	70	1,000	2.0	N	7	70
260023	2.0	1.0	1.0	.07	700	70.0	70	700	2.0	N	7	70
260024	2.0	1.0	1.0	.07	700	70.0	70	700	2.0	N	7	50
260025	3.0	1.0	1.0	.15	700	70.0	70	700	1.5	N	7	50
260026	3.0	1.0	1.0	.20	500	50.0	70	700	1.5	N	7	70
260027	2.0	1.0	1.0	.15	500	50.0	70	700	2.0	N	7	70
260028	2.0	1.0	1.0	.20	500	50.0	70	700	2.0	N	7	70
260029	2.0	1.5	1.5	.15	150	15.0	70	700	2.0	N	7	50
260030	2.0	1.5	1.5	.20	150	15.0	70	700	2.0	N	7	70
260031	1.5	1.0	1.0	.20	300	30.0	70	700	3.0	N	7	100
260032	2.0	1.5	1.0	.20	300	30.0	70	500	2.0	N	7	70
260033	2.0	1.5	1.00	.20	300	30.0	70	700	2.0	N	7	70
260034	2.0	1.5	1.00	.20	300	30.0	70	700	2.0	N	7	70
260035	1.5	1.5	1.50	.20	300	30.0	70	700	2.0	N	7	70
260036	2.0	1.5	1.5	.20	500	50.0	70	700	2.0	N	7	70
260037	3.0	1.5	1.5	.20	500	50.0	70	700	2.0	N	10	70
260038	2.0	1.5	1.50	.20	300	30.0	70	1,000	2.0	N	10	100
260039	1.5	1.5	1.5	.20	300	30.0	70	1,000	2.0	N	10	100
260040	2.0	1.0	1.0	.20	300	30.0	70	1,000	2.0	N	10	100
260041	2.0	1.5	1.5	.30	300	30.0	70	500	2.0	N	10	70
260042	1.5	1.0	1.00	.30	500	50.0	70	500	2.0	N	15	70
260043	1.5	1.5	1.50	.15	300	30.0	70	300	1.5	N	10	50
260044	1.5	1.5	1.5	.20	500	50.0	70	700	2.0	N	10	70
260045	1.5	2.0	1.00	.20	300	30.0	1.5	300	1.0	N	10	50
260046	2.0	1.0	1.0	.30	500	50.0	1.5	500	2.0	N	10	100
260047	1.5	2.0	1.00	.50	300	30.0	2.0	700	3.0	N	10	70
260048	2.0	1.5	2.0	.30	700	70.0	70	500	2.0	N	15	70
260049	2.0	1.5	2.0	.20	700	70.0	70	700	2.0	N	10	70
260050	1.5	2.0	1.50	.20	500	50.0	1.5	500	2.0	N	10	70
260051	1.5	3.0	2.00	.30	700	70.0	70	700	2.0	N	10	70
260052	2.0	2.0	2.00	.20	700	70.0	70	700	2.0	N	10	70
260053	2.0	3.0	3.00	.20	700	70.0	70	500	2.0	N	10	100
260054	2.0	3.0	3.00	.20	700	70.0	70	500	2.0	N	10	70
260055	1.5	3.0	3.00	.20	700	70.0	70	700	2.0	N	10	70
260056	1.5	3.0	3.00	.30	700	70.0	70	700	2.0	N	10	70
260057	2.0	3.0	3.00	.30	1,000	100.0	70	700	2.0	N	10	70
260058	2.0	3.0	3.00	.20	700	70.0	70	700	2.0	N	10	70
260059	2.0	3.0	3.00	.20	1,000	100.0	1.5	700	2.0	N	10	70
260060	1.5	3.0	3.00	.20	1,000	100.0	1.5	700	2.0	N	10	70
260061	2.0	3.0	3.00	.20	700	70.0	1.5	700	2.0	N	10	70
260062	1.5	3.0	3.00	.20	700	70.0	1.0	700	2.0	N	7	70

Table 1.—Results of semiquantitative sorptiographic analyses of selected cores from the Blacktail Mountain drill sites, Flathead County, Montana, --continued.

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling site, Flathead County, Montana--continued.

Sample No.	FF%	MGX	CAX	TIT%	MFI	AG	R	TA	AF	RI	CO	CR
2600017	2.0	3.0	2.00	-15	1,500	2.0	70	700	1.5	<10	10	100
2600018	2.0	2.0	-20	-20	700	3.0	70	500	2.0	<10	15	70
2600019	3.0	-10	-10	-30	1,500	1.5	70	700	2.0	<10	20	70
2600020	2.0	3.0	-10	-20	1,500	2.0	70	500	2.0	<10	15	70
2600021	2.0	3.0	-10	-20	1,500	2.0	70	700	2.0	<10	15	100
2600022	3.0	2.0	-20	-20	1,500	-5	70	700	2.0	<10	15	70
2600023	2.0	2.0	-15	-30	1,500	5.0	70	700	1.5	<10	15	70
2600024	2.0	2.0	-15	-30	1,500	3.0	70	700	1.5	<10	15	70
2600025	2.0	2.0	-15	-20	1,500	1.5	70	1,000	1.5	N	10	70
2600026	1.5	5.0	-20	-20	1,500	1.5	70	700	1.5	N	10	70
2600027	1.5	3.0	-20	-20	1,500	N	70	500	1.5	N	5	70
2600028	1.5	3.0	-20	-20	1,500	1.5	70	1,000	1.5	N	5	100
2600029	1.5	1.5	-20	-20	1,500	3.0	70	1,000	1.5	N	7	50
2600030	1.5	1.5	-20	-20	1,500	1.5	70	700	1.5	N	7	70
2600031	1.5	1.5	-20	-20	1,500	10.0	50	200	1.5	N	7	50
2600032	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	15	70
2600033	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600034	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600035	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600036	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600037	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600038	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600039	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600040	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600041	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600042	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600043	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600044	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600045	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600046	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600047	1.5	1.0	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600048	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600049	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600050	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600051	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600052	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600053	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600054	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600055	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600056	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600057	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600058	1.5	1.5	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600059	1.5	1.5	-20	-20	1,500	1.5	70	300	1.5	N	7	70
2600060	1.5	1.5	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600061	2.0	2.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	100
2600062	2.0	2.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600063	2.0	2.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600064	2.0	2.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	100
2600065	3.0	2.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600066	2.0	2.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600067	3.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	100
2600068	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600069	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600070	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600071	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600072	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600073	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600074	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600075	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600076	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600077	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600078	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600079	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600080	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600081	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600082	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600083	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600084	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600085	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600086	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600087	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600088	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600089	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600090	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600091	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600092	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600093	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600094	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600095	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600096	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600097	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600098	1.0	1.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600099	1.0	1.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600100	3.0	2.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600101	3.0	2.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600102	3.0	2.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600103	1.0	1.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600104	2.0	2.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70
2600105	3.0	2.0	-20	-20	1,500	1.5	70	500	2.0	N	7	70
2600106	3.0	2.0	-20	-20	1,500	1.5	70	1,000	1.5	N	7	70
2600107	2.0	2.0	-20	-20	1,500	1.5	70	300	2.0	N	7	70

Table 1.—Results of semiinertial spectrographic analyses of selected samples from the Blacktail Mountain drilling sites, Flathead County, Montana—Continued.

Sample	Cu	La	Mo	Pt	Pt	Sc	Sc	SR	V	Y	Zr
260067	1,500	70	N	20	30	10	100	N	50	200	
260068	1,000	50	N	30	70	70	100	N	50	150	
260069	700	70	N	30	70	15	150	N	50	150	
260070	1,500	70	<5	20	50	10	100	N	50	200	
260071	2,000	70	N	30	70	10	100	N	50	150	
260072	50	70	N	20	50	70	100	N	50	150	
260073	1,500	70	N	20	50	10	100	N	50	150	
260074	1,000	70	N	20	70	10	100	N	50	150	
260075	300	50	N	20	70	10	100	N	50	150	
260076	150	150	N	20	30	10	100	N	50	150	
260077	30	70	N	30	30	7	100	N	50	150	
260078	200	70	N	30	30	10	100	N	50	200	
260079	200	70	N	20	30	10	100	N	50	150	
260080	150	70	N	15	20	7	100	N	50	150	
260081	150	70	N	30	30	7	100	N	50	200	
260082	200	70	N	30	30	10	100	N	50	200	
260083	70	70	N	20	30	7	100	N	50	200	
260084	150	50	N	30	30	15	100	N	50	200	
260085	50	70	N	20	30	15	100	N	50	200	
260086	70	70	N	30	30	15	100	N	50	200	
260087	100	70	N	15	30	5	100	N	50	200	
260088	100	50	N	15	30	7	100	N	50	200	
260089	30	50	N	15	30	7	100	N	50	200	
260090	70	30	N	15	30	7	100	N	50	200	
260091	50	70	N	15	30	10	100	N	50	150	
260092	15	50	N	15	30	10	100	N	50	150	
260093	20	30	N	20	30	10	100	N	50	150	
260094	30	50	N	30	30	15	100	N	50	200	
260095	30	50	N	20	30	15	100	N	50	200	
260096	70	70	N	20	30	10	100	N	50	200	
260097	50	50	N	15	30	15	100	N	50	200	
260103	15	60	N	20	30	7	100	N	50	200	
260104	20	30	N	15	30	7	100	N	50	200	
260105	15	50	N	20	30	10	100	N	50	200	
260106	100	50	N	20	30	10	100	N	50	200	
260107	30	70	N	15	30	10	100	N	50	200	

See footnotes at end of table.

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana,--continued.

Sample	FEZ	MGX	Cpx	TiO ₂	Mn	Al	Rb	Na	Ca	CO	CR
260112	2.0	1.5	.07	.30	200	<.5	.70	.500	1.5	N	7
260113	2.0	1.5	.07	.20	500	<.5	.70	.500	1.5	N	7
260114	3.0	1.5	.07	.30	200	<.5	.70	.700	2.0	N	7
260115	3.0	1.5	.07	.30	300	<.5	.70	.500	1.5	N	7
260116	2.0	1.5	.07	.20	300	<.5	.50	.500	1.5	N	7
260117	3.0	1.0	.07	.30	300	<.5	.70	.500	1.5	N	30
260118	2.0	1.5	.05	.15	300	<.5	.50	.500	1.0	N	5
260119	2.0	1.0	.05	.15	200	<.5	.50	.500	1.5	N	50
260120	3.0	1.5	.30	.39	200	N	N	1,000	2.0	N	50
260121	3.0	3.0	.70	.20	300	N	N	1,500	1.5	N	7
260122	3.0	3.0	.20	.30	200	N	N	700	2.0	N	100
260123	1.5	.5	.05	.15	300	<.5	.50	.500	1.0	N	10
260124	2.0	2.0	.50	.30	500	N	N	1,000	3.0	N	50
260125	2.0	2.0	.50	.20	500	N	N	700	2.0	N	50
260126	2.0	3.0	1.50	.30	700	N	N	700	2.0	N	150
260127	2.0	5.0	1.50	.30	700	N	N	700	2.0	N	7
260128	2.0	2.0	2.00	.30	200	N	N	700	2.0	N	100
260129	2.0	7.0	3.00	.20	1,000	N	N	700	2.0	N	100
260130	2.0	7.0	7.00	.15	1,500	N	N	700	1.5	N	100
260131	2.0	7.0	5.00	.15	1,500	N	N	500	2.0	N	7
260132	2.0	10.0	5.00	.20	1,500	N	N	700	1.5	N	10
260133	2.0	7.0	7.00	.20	2,000	N	N	500	1.5	N	10
260134	2.0	5.0	5.00	.20	1,500	N	N	700	1.5	N	70
260135	2.0	7.0	3.00	.20	1,000	N	N	700	1.5	N	50
260136	2.0	3.0	.50	.20	500	N	N	700	2.0	N	70
260137	2.0	3.0	1.50	.20	700	N	N	700	2.0	N	70
260138	2.0	3.0	3.00	.20	700	N	N	700	2.0	N	70
260139	2.0	3.0	1.00	.30	500	N	N	700	3.0	N	15
260140	2.0	3.0	1.00	.30	500	N	N	700	2.0	N	100
260141	2.0	3.0	1.50	.20	500	N	N	700	2.0	N	10
260142	2.0	3.0	1.00	.30	500	N	N	1,000	3.0	N	70
260143	3.0	3.0	1.50	.30	200	N	N	700	3.0	N	50
260144	3.0	3.0	1.50	.20	1,000	N	N	700	3.0	N	10
260145	2.0	3.0	2.00	.30	1,000	N	N	700	2.0	N	50
260146	2.0	3.0	1.00	.30	500	N	N	700	2.0	N	70
260147	2.0	3.0	.50	.30	1,000	N	N	700	2.0	N	10
260148	1.5	3.0	.50	.20	300	N	N	700	1.5	N	50
260149	2.0	3.0	.50	.20	500	N	N	700	1.5	N	70
260150	1.5	3.0	.50	.20	1,500	N	N	700	1.5	N	10
260151	1.5	3.0	.50	.20	1,000	N	N	700	1.5	N	10
260152	1.5	3.0	.50	.20	1,000	N	N	700	1.5	N	10
											15

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling site, Flathead County, Montana--continued.

sample	cu	la	ni	ra	sr	sr	v	y	zr
	#o	#n	#n	#n	#n	#n	#n	#n	#n
260108	30	50	20	20	10	100	50	200	200
260109	50	50	20	20	10	100	50	200	200
260110	15	50	20	20	15	150	50	200	200
260111	50	50	20	20	5	50	50	200	200
260112	50	50	20	20	15	100	50	200	200
260113	100	10	7	30	5	50	50	150	150
260114	20	20	10	20	7	50	50	150	150
260115	7	70	20	20	10	70	50	300	300
260116	5	30	20	20	7	70	50	300	300
260117	5	50	20	20	10	100	50	300	300
260118	<5	70	20	30	15	100	50	300	300
260119	15	30	20	20	7	70	50	300	300
260120	<5	70	20	20	15	150	70	300	300
260121	<5	50	20	20	15	100	50	300	300
260122	<5	70	20	30	15	70	50	200	200
260123	N	70	20	30	10	<100	70	50	200
260124	<5	50	20	20	7	150	50	150	150
260125	<5	70	15	20	7	100	70	50	150
260126	10	70	20	30	10	100	70	50	200
260127	<5	70	20	20	7	150	70	50	200
260128	7	50	20	30	10	150	70	50	200
260129	<5	50	20	30	7	100	50	200	200
260130	<5	70	20	30	15	150	70	50	200
260131	<5	50	20	30	10	100	50	200	200
260132	N	70	30	20	15	N	50	200	300
260133	N	70	20	20	15	N	150	70	200
260134	N	50	20	20	10	N	70	50	300
260135	N	30	15	20	7	N	70	50	200
260136	N	70	15	30	10	N	70	50	200
260137	N	70	15	20	10	N	70	50	100
260138	N	70	20	20	10	N	70	50	300
260139	N	50	15	30	7	N	50	50	300
260140	N	70	20	20	10	N	70	70	300
260141	N	100	15	20	15	N	100	70	300
260142	<5	70	20	30	10	N	70	50	300
260143	N	50	20	15	7	N	70	50	300
260144	N	50	20	20	7	N	70	50	300
260145	5	70	15	30	10	N	50	50	150
260146	<5	70	20	20	15	N	100	70	200
260147	N	100	20	30	15	N	100	70	150
260148	<5	50	20	20	15	<100	70	50	150
260149	<5	50	20	20	10	<100	70	50	150
260150	<5	70	20	30	10	100	70	50	200
260151	<5	70	20	30	10	<100	70	50	150
260152	<5	70	20	30	10	<100	70	50	200

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Rictartail Mountain drilling sites, Flathead County, Montana,--continued.

sample	fx	mgx	cax	tit	mn	ag	p	ri	co	cr
260153	1.5	5.0	3.00	.30	1,500	N	70	500	2.0	70
260154	1.5	3.0	1.50	.20	700	N	70	500	1.5	70
260155	1.5	3.0	1.50	.20	700	N	70	500	1.5	30
260156	1.5	2.0	1.50	.30	500	N	70	700	1.5	50
260157	2.0	2.0	1.00	.30	500	N	70	1,000	2.0	50
260158	2.0	2.0	1.00	.20	300	N	70	1,000	2.0	50
260159	2.0	2.0	1.70	.30	500	N	70	1,500	2.0	100
260160	3.0	2.0	1.00	.30	500	N	70	1,500	1.5	70
260161	5.0	3.0	1.00	.30	500	N	70	1,500	1.5	100
260162	5.0	2.0	.70	.20	300	N	70	1,500	1.5	70
260163	3.0	1.5	.50	.20	200	N	70	700	2.0	70
260164	5.0	3.0	2.00	.30	700	N	70	1,000	2.0	70
260165	3.0	1.5	.70	.30	300	N	70	1,000	1.5	70
260166	2.0	1.5	.50	.30	300	N	70	700	1.5	70
260167	3.0	1.5	.70	.30	300	N	70	1,000	2.0	70
260168	3.0	1.5	.70	.30	300	N	70	1,500	1.5	70
260169	2.0	1.5	.70	.30	200	N	70	1,500	1.5	70
260170	2.0	2.0	1.50	.30	500	N	70	1,500	2.0	100
260171	2.0	2.0	.50	.20	300	N	70	1,000	2.0	70
260172	3.0	3.0	1.50	.30	700	N	70	1,500	2.0	100
260173	2.0	1.5	.30	.20	200	N	70	1,000	2.0	50
260174	3.0	2.0	1.00	.30	300	N	70	1,500	2.0	70
260175	3.0	2.0	1.00	.30	200	N	70	1,500	2.0	100
260176	2.0	2.0	.50	.20	200	N	70	1,500	1.5	70
260177	3.0	2.0	.70	.30	300	N	70	1,500	1.5	50
260178	3.0	1.5	.30	.20	500	N	70	1,500	3.0	70
260179	5.0	2.0	.50	.50	300	N	70	1,500	3.0	100
260180	3.0	1.5	1.00	.30	300	N	70	700	1.5	50
260181	3.0	2.0	.70	.30	500	N	70	700	2.0	70
260182	5.0	2.0	1.00	.30	300	N	70	1,000	2.0	100
260183	5.0	2.0	1.00	.30	500	N	70	1,000	2.0	70
260184	2.0	2.0	1.50	.50	500	N	70	1,500	2.0	100
260185	5.0	2.0	1.00	.20	500	N	100	1,500	3.0	70
260186	5.0	3.0	.70	.30	300	N	70	1,000	2.0	15
260187	3.0	2.0	1.50	.30	500	N	70	1,000	2.0	70
260188	5.0	5.0	3.00	.30	1,500	N	70	1,500	2.0	70
260189	5.0	5.0	2.00	.30	1,000	N	100	1,000	2.0	70
260190	3.0	5.0	5.00	.30	1,000	N	70	1,000	3.0	100
260191	3.0	5.0	7.00	.20	1,500	N	70	700	2.0	70
260192	3.0	7.0	5.00	.30	1,500	N	70	1,000	2.0	15
260193	5.0	7.0	10.00	.30	2,000	N	70	700	1.5	100
260194	1.5	7.0	10.00	.20	2,000	N	70	700	2.0	70
260195	2.0	7.0	15.00	.20	2,000	N	70	500	1.5	10
260196	2.0	5.0	7.00	.70	1,500	N	70	700	2.0	70
260197	1.5	3.0	3.00	.30	1,000	N	70	1,500	1.5	7

core frontages at end of trip.

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain--Flathead County, Montana,--continued.

Sample	CU	LA	WC	WT	PR	SC	SR	V	Y	ZR
260153	7	70	N	15	30	10	<100	50	200	
260154	20	70	N	15	30	10	100	50	150	
260155	<5	70	N	20	30	7	N	50	200	
260156	<5	50	N	20	30	10	N	50	300	
260157	<5	70	N	20	-	30	N	50	300	
260158	N	70	N	15	N	N	N	50	200	
260159	N	70	N	20	30	15	N	50	300	
260160	N	70	N	70	30	15	N	50	200	
260161	N	70	N	20	30	10	N	50	200	
260162	N	70	N	20	30	20	N	50	200	
260163	N	50	N	20	30	10	N	50	200	
260164	N	50	N	20	30	15	N	50	200	
260165	<5	50	N	20	30	10	N	50	200	
260166	<5	50	N	20	30	10	N	50	200	
260167	<5	50	N	20	30	10	N	50	200	
260168	<5	50	N	20	30	10	<100	70	200	
260169	N	50	N	20	30	10	N	50	200	
260170	N	50	N	20	30	10	N	50	200	
260171	<5	70	N	20	30	15	N	50	300	
260172	<5	70	N	20	30	20	N	70	200	
260173	5/	<5	N	20	30	7	N	70	300	
260174	5/	30	50	20	30	15	<100	70	150	
260175	<5	70	N	20	30	15	N	50	200	
260176	<5	70	N	30	30	7	N	70	200	
260177	<5	70	N	20	30	15	N	70	200	
260178	6/	N	N	15	30	15	N	50	200	
260179	15	70	N	20	30	20	N	70	500	
260180	<5	50	N	15	30	10	N	50	300	
260181	300	50	N	7	30	10	N	70	200	
260182	15	70	N	15	50	15	N	50	200	
260183	20	100	N	20	30	0	N	50	300	
260184	20	100	N	20	30	15	N	70	300	
260185	30	50	N	20	30	15	N	50	300	
260186	20	50	N	20	30	15	N	50	300	
260187	20	70	N	20	30	10	N	70	200	
260188	30	70	N	20	30	20	N	150	200	
260189	20	70	N	20	30	10	N	50	200	
260190	N	70	N	15	30	15	N	100	200	
260191	N	30	N	15	30	7	<100	70	150	
260192	N	70	N	15	30	20	N	150	200	
260193	N	70	N	15	30	15	N	100	150	
260194	<5	50	N	10	50	10	<100	70	150	
260195	<5	50	N	15	50	7	<100	70	150	
260196	50	50	N	10	30	10	<100	100	150	
260197	200	30	N	10	30	10	<100	100	150	

See footnotes at end of table.

Table I.—Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites,
Flathead River, Montana--continued.

Sample	FEZ	MGX	CAX	TIT	Mg	Al	N	Ru	RE	RI	CO	CR
26n109	2.0	5.0	5.00	•30	7.0	7.0	70	1,000	1.5	<10	10	70
26n199	2.0	7.0	3.00	•30	7.0	7.0	70	500	2.0	<10	15	70
26n200	2.0	7.0	5.00	•20	7.0	7.0	70	500	2.0	<10	15	70
26n201	1.5	7.0	5.00	•20	5.0	7.0	70	700	1.5	<10	10	50
26n202	2.0	7.0	5.00	•30	5.0	7.0	70	500	1.5	<10	15	70
26n203	2.0	7.0	5.00	•20	5.0	7.0	70	500	1.5	<10	15	70
26n204	3.0	7.0	2.00	•20	5.0	7.0	70	700	1.5	<10	15	50
26n205	2.0	7.0	3.00	•20	5.0	7.0	70	1,000	2.0	<10	15	70
26n206	3.0	7.0	3.00	•30	5.0	7.0	70	700	1.5	<10	15	70
26n207	2.0	5.0	3.00	•20	5.0	7.0	70	700	1.5	N	15	70
26n208	2.0	5.0	3.00	•30	5.0	7.0	70	700	1.5	N	10	50
26n209	2.0	3.0	1.00	•30	5.0	7.0	70	500	1.5	N	7	70
26n210	3.0	3.0	1.70	•30	5.0	7.0	70	500	2.0	N	10	100
26n211	1.5	2.0	1.00	•20	5.0	7.0	70	500	2.0	N	10	70
26n212	1.5	2.0	2.00	•20	5.0	7.0	70	500	1.5	N	7	70
26n213	2.0	3.0	1.50	•30	5.0	7.0	70	1,000	2.0	N	7	70
26n214	2.0	2.0	0.50	•30	5.0	7.0	70	1,500	2.0	N	10	70
26n215	2.0	3.0	0.50	•30	5.0	7.0	70	1,000	2.0	N	10	70
26n216	2.0	2.0	0.50	•20	5.0	7.0	70	1,500	1.5	N	10	70
26n217	2.0	3.0	0.70	•20	5.0	7.0	70	1,500	2.0	N	10	70
26n218	3.0	2.0	•15	•30	3.0	7.0	70	1,500	2.0	N	15	70
26n219	2.0	1.5	•10	•30	2.0	7.0	70	1,500	2.0	N	7	70
26n220	3.0	2.0	•20	•20	2.0	7.0	70	1,000	1.5	N	10	70
26n221	5.0	2.0	•10	•20	2.0	7.0	70	1,500	2.0	N	10	70
26n222	5.0	2.0	•20	•20	2.0	7.0	70	1,500	2.0	N	10	70
26n223	5.0	2.0	•10	•30	2.0	7.0	70	1,500	3.0	N	10	70
26n224	7.0	2.0	•15	•30	2.0	7.0	70	1,000	2.0	N	10	70
25n225	5.0	2.0	•70	•50	2.0	7.0	70	1,000	2.0	N	15	70
26n226	3.0	2.0	1.00	•20	2.0	7.0	70	1,500	3.0	N	10	70
26n227	3.0	2.0	1.50	•30	2.0	7.0	70	1,000	2.0	N	10	70
26n228	2.0	2.0	1.00	•30	2.0	7.0	70	2,000	2.0	N	10	100
26n229	3.0	3.0	1.00	•30	2.0	7.0	70	1,000	2.0	N	10	50
26n230	2.0	3.0	1.00	•30	2.0	7.0	70	1,000	1.0	N	15	100
26n231	2.0	2.0	1.50	•30	2.0	7.0	70	700	2.0	N	7	50
26n232	3.0	3.0	1.00	•30	2.0	7.0	70	1,000	2.0	N	7	70
26n233	3.0	2.0	•20	•50	3.0	7.0	70	1,000	3.0	N	10	100
26n234	2.0	2.0	1.50	•30	3.0	7.0	70	1,500	2.0	N	15	100
26n235	2.0	2.0	1.00	•30	3.0	7.0	70	3,000	2.0	N	10	70
26n236	3.0	2.0	1.50	•30	1.5	7.0	70	2,000	1.5	N	7	70
26n237	2.0	2.0	1.50	•30	2.0	7.0	70	1,000	2.0	N	7	70
26n238	1.5	•7	•50	•20	1.5	7.0	70	500	1.5	N	5	50
26n239	2.0	1.0	•15	•20	1.5	7.0	70	500	2.0	N	7	70
26n240	3.0	1.5	•20	•20	1.5	7.0	70	500	2.0	N	7	100
26n241	3.0	1.0	•10	•30	1.5	7.0	70	500	2.0	N	10	100
26n242	3.0	1.5	•30	•30	1.5	7.0	70	500	2.0	N	10	70

See footnotes at end of table.

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from Blacktail Mountain drilling site, Flathead County, Montana--continued.

Sample	CU	LA	MO	NI	PA	SC	SR	V	Y	ZR
260198	3,000	50	<5	20	30	10	<100	100	50	150
260199	1,500	70	30	30	30	15	<100	100	30	150
260200	2,000	70	N	70	30	10	100	100	50	150
260201	2,000	70	N	N	15	30	7	100	50	150
260202	2,000	70	N	N	30	10	150	150	50	100
260203	2,000	70	<5	20	30	10	150	100	50	200
260204	1,000	70	N	20	30	10	100	100	50	200
260205	700	50	N	20	30	10	100	70	50	150
260206	700	70	N	20	30	15	<100	100	50	300
260207	150	70	N	20	30	10	70	50	50	150
260208	30	70	N	20	30	10	100	100	30	300
260209	10	70	N	30	30	15	<100	100	20	150
260210	15	70	N	30	30	15	<100	150	50	100
260211	20	70	N	15	30	7	N	70	30	200
260212	10	50	N	20	30	7	<100	70	50	200
260213	50	70	N	20	30	7	<100	100	50	300
260214	30	70	N	20	30	15	<100	100	50	200
260215	100	70	N	20	30	10	N	100	50	200
260216	30	70	N	20	30	10	N	70	50	200
260217	20	70	N	20	30	15	N	70	50	300
260218	20	70	N	30	30	15	N	100	50	300
260219	20	70	N	15	30	15	<100	70	50	200
260220	20	50	N	70	30	10	N	100	50	200
260221	15	50	N	20	30	15	N	150	50	200
260222	15	70	N	15	30	15	N	150	50	200
260223	15	50	N	20	30	10	N	150	50	200
260224	20	50	N	20	30	15	N	150	50	200
260225	30	70	N	20	30	15	N	150	50	200
260226	10	70	N	20	30	10	N	100	50	200
260227	30	70	N	20	30	10	100	100	50	300
260228	5	70	N	20	30	7	N	70	50	300
260229	5	70	N	20	30	15	N	150	50	200
260230	<5	50	N	20	30	7	100	70	50	150
260231	<5	70	N	20	30	10	N	100	50	200
260232	5	70	N	20	30	15	100	100	50	300
260233	7	70	N	30	30	15	N	100	50	300
260234	5	70	N	20	30	10	100	100	50	200
260235	<5	50	N	20	30	10	100	70	50	150
260236	5	50	N	20	30	10	N	70	50	200
260237	7	50	N	15	30	10	N	70	50	200
260238	5	70	N	10	30	7	N	70	50	200
260239	15	50	N	20	30	10	N	70	50	150
260240	30	70	N	20	30	15	N	100	50	200
260241	10	70	N	20	30	15	N	70	50	200
260242	7	70	N	20	30	10	N	70	50	200

Table 1.—Results of semiquantitative spectrophotographic analyses of selected cores from the Blacktail Mountain drilling sites, Flathead County, Montana--continued.

✓ Contains <200 ppm Zn
 ✓ Contains 10 ppm Sn
 ✓ Contains 20 ppm Nb
 ✓ Contains 30 ppm Nb
 ✓ Contains 15 ppm Sn
 ✓ Contains <10 ppm Sn
 ✓ Contains 10 ppm Sn and

Table 1.--Results of semiquantitative spectrographic analyses of selected cores from the Blacktail Mountain drilling sites, Latah County, Montana, --continued.

sample	cu	la	nr	nt	pr	sc	sr	v	y	zr
260243 7/	5	50	15	30	7	70	n	70	150	
260244 6/	7	50	15	30	7	70	n	70	200	
260245 2/	15	50	15	30	10	n	n	70	300	
260246 6/	30	70	30	30	15	n	n	150	300	
260247	30	70	20	30	15	n	n	100	300	
260248 2/	30	50	20	30	10	n	n	100	300	
260249	30	70	20	30	15	n	n	50	300	
260250	10	50	30	30	15	n	n	70	200	
260251	5	30	30	30	10	n	n	100	300	
260252	5	50	20	30	10	n	n	50	200	
260253 6/	10	50	20	30	15	n	n	100	200	
260254 6/	10	50	30	30	10	n	n	100	300	
260255	20	100	10	30	20	n	n	150	200	
260256 2/	<5	50	20	30	10	n	n	70	200	
260257 2/	<5	30	20	30	7	n	n	70	300	
260258	n	50	20	30	10	n	n	100	200	
260259	30	70	20	30	10	n	n	60	300	
260260	15	70	15	20	10	n	n	50	200	
260261	50	20	5	20	5	n	n	50	150	
260262	70	30	10	20	7	n	n	70	200	
260263	50	20	50	10	n	n	n	100	200	
260264	30	30	30	7	n	n	n	70	150	
260265	30	30	30	7	n	n	n	100	300	
260266	30	30	20	30	10	n	n	100	300	
260267	30	50	20	30	10	n	n	50	300	
260268	30	70	30	30	15	n	n	100	300	
260269	100	70	20	30	15	n	n	100	300	
260270	50	70	20	30	15	n	n	150	300	
260271	30	50	20	30	7	n	n	70	300	
260272	50	70	20	30	15	n	n	50	300	
260273	15	50	15	50	7	n	n	70	300	

1/ Contains <200 ppm Zn.

2/ Contains 10 ppm Sn.

3/ Contains 20 ppm Nb.

4/ Contains 30 ppm Nb.

5/ Contains 15 ppm Sn.

6/ Contains <10 ppm Sn.

7/ Contains 10 ppm Sn and 20 ppm Nb.